



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/491,721

01/27/2000

James W. Cree

31358-233

8978

7590

06/06/2006

TREDEGAR FILM PRODUCTS CORPORATION  
1100 BOULDERS PARKWAY  
RICHMOND, VA 23225

EXAMINER

GOFMAN, ANNA

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

09/491,721

Applicant(s)

CREE ET AL.

Examiner

Jeremy R. Pierce

Art Unit

1771

-- The MAILING DATE of this c mmunication appears on th c ver sheet with the corresp ndence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on March 24, 2006 has been entered. Claim 1 has been amended. Claims 1-17 and 25-30 are currently pending.

### ***Claim Rejections - 35 USC § 102/103***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-11, 13-17, and 25-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morman (U.S. Patent No. 5,336,545).

Morman teaches a composite elastic neck-bonded material comprising a necked fabric bonded to an elastic sheet (column 3, lines 19-24). The elastic sheet may be a film (column 3, lines 6-7) and can have two necked fabrics bonded on both sides of it (column 3, lines 31-35). Morman uses similar materials as the Applicant, such as

polypropylene for the necked nonwoven fabric (column 25, lines 41-45) and block copolymers for the elastic sheet (column 6, lines 55-56). Although Morman does not explicitly teach the limitations ultimate force to break values of the nonwoven fabrics and the composite in grams per inch, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polypropylene for the nonwoven and block copolymer films for the elastic sheet) and in the similar production steps (i.e. lateral consolidation of the web) used to produce the elastic composite material. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, it would have been obvious to a person having ordinary skill in the art to provide the claimed ultimate force to break properties in order to provide a composite with an increased resistance to breaking, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

With regard to claims 1 and 25, the recitation that the nonwoven webs have been "laterally consolidated" or "set in a transversely consolidated state before being bonded to the elastic polymeric film" is a processing limitation in a product claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is

the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP § 2113 [R-1]. In this case, while the nonwoven fabric may not be set in a transversely consolidated state before being bonded to the elastic polymeric film, the nonwoven fabric is still consolidated through necking (column 5, lines 29-46). The nonwoven fabrics of Morman are set because it may be meltblown or spunbonded (column 5, lines 14-17), and such fabrics have fibers that are bonded sufficiently to form a fabric. Additionally, when the nonwoven fabrics of Morman are bonded to the film, heat is applied (column 8, line 56). The fibers would remain in a consolidated state thereafter (i.e. they would be set). Thus, the final product would be substantially similar to the claimed product even though a different process makes it. With regard to claim 30, the final product of Morman appears similar to that claimed by Applicant because similar production steps are used, albeit in a different order (i.e. the web would be set after being bonded to the film). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

With regard to claim 3, having between 2 and 50% of the thermoplastic fibers skewed in a direction greater than about 10 degrees from the machine direction is an inherent feature to the nonwoven web of Morman since the webs are meltblown, which involves random deposition of the fibers. With regard to claim 4, Morman teach the

Art Unit: 1771

nonwoven web is made from microfibers with an average diameter of from about 4 to 40 microns (column 2, lines 32-37). It is known that 15-micron polypropylene is equal to 1.42-denier polypropylene; thus, Applicant's claimed range for fiber mass per unit area is clearly anticipated. With regard to claim 5, meltblown fibers are randomly deposited (column 2, lines 38-50). With regard to claim 6, Morman discloses the fabric can weigh between 0.2 and 10 ounces per square yard (column 6, lines 5-21). With regard to claim 10, Morman discloses the preferred use of low weight elastic sheets for economic reasons, but also discloses the use of sheets with a basis weight of up to 10 ounces per square yard (column 9, lines 1-7). With regard to claims 13 and 29, although Morman does not explicitly teach the limitation of Dart Impact value for the elastic sheet, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. block copolymer) and in the similar production steps (i.e. similar weights) used to produce the elastic sheet. The burden is upon the Applicant to prove otherwise. In the alternative, it would have been obvious to one having ordinary skill in the art to provide a polymeric film layer with a Dart Impact value of at least 400 grams in order to create a film that is puncture and resistant, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claims 15-17, Morman discloses the nonwoven fabrics and elastic sheet can comprise multiple layers (column 3, lines 19-46).

***Claim Rejections - 35 USC § 103***

5. Claims 1-6, 9-11, 13-17, and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morman (as set forth above) in view of Hassenboehler et al. (U.S. Patent No. Re 35,206).

With regard to claims 1 and 25, Morman does not disclose the processing limitation of laterally consolidating the fabric layers or setting the fabric layers in a transversely consolidated state before bonding to the film. Hassenboehler et al. also teach transversely consolidating a nonwoven web (Abstract). Hassenboehler et al. teach that the nonwoven materials exhibit remarkable elasticity in the cross-direction (column 8, lines 30-34). It would have been obvious to a person having ordinary skill in the art at the time of the invention to transversely consolidate the web of Morman in order to increase the elasticity in the cross-direction, as taught by Hassenboehler et al.

6. Claims 7, 8, and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Morman in view of Haffner et al. (U.S. Patent No. 5,789,065) or alternatively over Morman in view of Hassenboehler et al. and further in view of Haffner et al.

Morman do not teach the elastic sheet to be made from metallocene-based low-density polyethylene film. Haffner et al. disclose block copolymers and metallocene-catalyzed ethylene films as suitable elastic film layers useful in the same art of personal care products. It would have been obvious to one having ordinary skill in the art to use a metallocene-catalyzed ethylene film in the composite of Morman, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. With regard to

Art Unit: 1771

claim 12, Morman does not teach perforating the elastic sheet. However, Haffner et al. disclose providing perforations in the elastic film layer allow it to be breathable. It would have been obvious to one having ordinary skill in the art to provide perforations in the elastic sheet of Morman in order to provide breathability to the composite, as taught by Haffner et al.

### ***Response to Declaration***

7. Applicant's Declaration filed on March 24, 2006 has been considered but is not persuasive. Applicant's Declaration is not commensurate in scope with the claimed invention. Applicant's fails to provide any numerical values of ultimate force to break to compare the claimed invention.

### ***Response to Arguments***

8. Applicant's arguments filed March 24, 2006 have been fully considered but they are not persuasive.

9. Applicant argues that Morman fails to teach a nonwoven web of laterally consolidated fibers. However, necking is a type of lateral consolidation. Necking meets the limitation for lateral consolidation. Although Applicant asserts the present invention is different because it is consolidated using heat, there is no claim limitation directed to how the nonwoven web is consolidated.

10. Applicant argues that the Declaration provides evidence that laterally consolidated webs of the present invention have better bonding point integrity compared



to necked webs. However, the Declaration does not provide any data as to why the prior fails to meet the claimed limitations.

11. Applicant argues that the Office merely points to individual characteristics of different processes in Morman to confirm its position. Applicant then points out that consolidation involves applying heat to a nonwoven fabric to restructure the fabric's fibers which, in turn, leads to a narrowing of the fabric's width. However, the dictionary definition of "consolidation" does not discuss the use of heat. The necking of Morman meets the limitation of consolidation because necking shrinks the fabric in the width direction. No claim limitation is directed to the use of heat.

12. Applicant argues that modifying Morman in view of Hassenboehler would change the basic principle of operation of Morman because Hassenboehler use heat. However, Hassenboehler et al. teach that consolidating the nonwoven material by heat setting creates a fabric with improved elasticity. Therefore, it would be obvious to a person of ordinary skill to consolidate the fabrics provided in Morman according to the process of Hassenboehler et al. in order to derive improved elasticity.

13. Applicant argues that Haffner does not cure the deficiencies of Morman. However, the Examiner does not believe Morman to be deficient.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

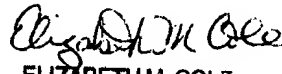
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on normal business hours, but works flextime hours.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1771

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
ELIZABETH M. COLE  
PRIMARY EXAMINER

  
Jeremy R. Pierce  
Examiner  
Art Unit 1771